

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 99/00178

**A. CLASSIFICATION OF SUBJECT MATTER**Int Cl<sup>6</sup>: B65D 77/06, 17/44, 30/24, 47/38, B29C 63/28, B67D 3/04, B67B 7/46, B65B 55/02, A61L 2/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

B65D 17/-, 25/-, 30/-, 33/-, 39/-, 47/-, 77/-, 88/-, 90/-, B67D, B29C 63/-, B67B, F16L 41/-, B65B 55/-, A61L 2/-

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT (liner#, diaphragm#, membrane#, bag#, pouch#, bladder#, nozzle#, spigot#, outlet#, port#, pipe#, tube#, tubu., cut:, sever:, pierc:, ruptur:, stopper#, valve#, gate#, tap#, seal:, cover:, foil, knife#, blade#, spik:)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                | Relevant to claim No.    |
|-----------|---|--------------------------|
| X         | DE 3510849 A (NILGEN) 2 October 1986<br>See whole document, particularly Abstract and figures 1-3 | 1-5, 13, 14, 20-23       |
| X<br>A    | EP 072699 A (WRIGHTCEL LTD) 23 February 1983<br>See pages 15 lines 13-25                          | 1-5, 13, 14, 20-23<br>15 |
| X<br>A    | EP 271242 A (COURTAULDS PACKAGING AUSTRALIA LTD) 15 June 1988<br>See whole document               | 1-5, 13, 14, 20-23<br>15 |

☒ Further documents are listed in the continuation of Box C☒ See patent family annex

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
24 May 1999

Date of mailing of the international search report  
**31 MAY 1999**

Name and mailing address of the ISA/AU  
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## INTERNATIONAL SEARCH REPORT

International application No.

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**Box 1** Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

**Box II** Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Claims 1-5, 20, 21 are directed to a tote bin liner having a wall including a transfer spigot. The transfer spigot comprising a tubular body having an opening, an annular surface around the opening, a rupturable membrane sealed to the annular surface and the tubular body being shaped to mount a valve to the body such that a seal on the valve clamps the membrane against the annular surface.

See extra sheet for remaining inventions

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

International application No.

**PCT/AU 99/00178**

**Box II**

Claims 6-14 are directed to a cutter assembly having a valve with a valve body for engaging a spigot. The valve body includes a valve closure. The elongate cutter has an actuation means to provide axial movement of the cutter and the actuation means and/or the cutter body is adapted to move the cutter body to cut a membrane independently of the operation of the valve closure.

Claims 15-19 are directed to a method of sterilising a membrane. The method comprises attaching a valve with a flow passage and valve closure to the membrane, passing a sterilising medium into the space between the valve closure and the membrane and piercing the membrane with a cutter which passes along the flow passage when the valve closure member is in the open position.

Since the above groups of claims do not share technical features, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept.

# INTERNATIONAL SEARCH REPORT

## Information on patent family members

International application No.

PCT/AU 99/00178

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in Search Report |         |    |          | Patent Family Member |          |    |          |
|--|---------|----|----------|----------------------|----------|----|----------|
| EP                                     | 072699  | AU | 87254/82 | BR                   | 8204813  | CA | 1182269  |
|  |         | ES | 515059   | ES                   | 8401399  | GB | 2105291  |
|  |         | GR | 76259    | JP                   | 58041026 | NZ | 201610   |
|  |         | US | 4805378  | ZA                   | 8205969  |    |          |
| EP                                     | 271242  | AU | 81460/87 | BR                   | 8706285  | CN | 87107932 |
|  |         | FI | 875114   | JP                   | 63152502 | NZ | 222611   |
|  |         | US | 4942716  | ZA                   | 8708670  |    |          |
| US                                     | 4916885 | AU | 24774/88 | BR                   | 8806182  | CA | 1289920  |
|  |         | CH | 674637   | CN                   | 1042875  | DK | 6549/88  |
|  |         | EP | 317908   | ES                   | 2014547  | FI | 885388   |
|  |         | JP | 1167030  | NO                   | 885212   | NZ | 227056   |
|  |         | PH | 25308    | PT                   | 89067    | SG | 789/94   |
|  |         | ZA | 8808430  |                      |          |    |          |
| US                                     | 5099895 | AU | 53796/90 | CA                   | 2015357  | CH | 679768   |
|  |         | EP | 395933   | JP                   | 2302257  | PT | 93928    |
| END OF ANNEX                           |         |    |          |                      |          |    |          |

PATENT COOPERATION TREATY

## PCT

CORRECTED VERSION

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|  |   |  |
|--|---|--|
| Applicant's or agent's file reference<br>2015240:KJB | FOR FURTHER ACTION  | see Notification of Transmittal of International Search Report<br>(Form PCT/ISA/220) as well as, where applicable, item 5 below. |
| International application No.<br>PCT/AU 99/00178     | International filing date (day/month/year)<br>18 March 1999 | (Earliest) Priority Date (day/month/year)<br>18 March 1998   |
| Applicant<br>SOUTHCORP AUSTRALIA PTY LTD et al       |   |  |

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 7 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

☐ Certain claims were found unsearchable (See Box I).

3. ☒ Unity of invention is lacking (See Box II).

4. With regard to the title, ☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract, ☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.4

☒ as suggested by the applicant.

☐ None of the figures

☐ because the applicant failed to suggest a figure

☐ because this figure better characterizes the invention

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 99/00178

**Box I** Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

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because they relate to subject matter not required to be searched by this Authority, namely:
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because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

**Box II** Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Claims 1-5, 20, 21 are directed to a tote bin liner having a wall including a transfer spigot. The transfer spigot comprising a tubular body having an opening, an annular surface around the opening, a rupturable membrane sealed to the annular surface and the tubular body being shaped to mount a valve to the body such that a seal on the valve clamps the membrane against the annular surface.

See extra sheet for remaining inventions

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 99/00178

**Box II**

Claims 6-14 are directed to a cutter assembly having a valve with a valve body for engaging a spigot. The valve body includes a valve closure. The elongate cutter has an actuation means to provide axial movement of the cutter and the actuation means and/or the cutter body is adapted to move the cutter body to cut a membrane independently of the operation of the valve closure.

Claims 15-19 are directed to a method of sterilising a membrane. The method comprises attaching a valve with a flow passage and valve closure to the membrane, passing a sterilising medium into the space between the valve closure and the membrane and piercing the membrane with a cutter which passes along the flow passage when the valve closure member is in the open position.

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## INTERNATIONAL SEARCH REPORT

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WPAT (liner#, diaphragm#, membrane#, bag#, pouch#, bladder#, nozzle#, spigot#, outlet#, port#, pipe#, tube#, tube#, cut#, sever#, pierc#, ruptur#, stopper#, valve#, gate#, tap#, seal#, cover#, foil, knife#, blade#, spik#)**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                | Relevant to claim No. |
|-----------|---|-----------------------|
| X         | DE 3510859 A (NILGEN) 2 October 1986<br>See whole document, particularly Abstract and figures 1-3 | 1-5,13,14,20-23       |
| X<br>A    | EP 072699 A (WRIGHTCEL LTD) 23 February 1983<br>See pages 15 lines 13-25                          | 1-5,13,14,20-23<br>15 |
| X<br>A    | EP 271242 A (COURTAULDS PACKAGING AUSTRALIA LTD) 15 June 1988<br>See whole document               | 1-5,13,14,20-23<br>15 |

☒ Further documents are listed in the continuation of Box C☒ See patent family annex

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
24 May 1999

Date of mailing of the international search report  
31 MAY 1999

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14. SEP. 2000 16:20

FR S SYDNEY3 61 2 93224000

NO. 0906 P. 42/77

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 99/00178

| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT |  |                       |
|---|--|-----------------------|
| Category*   | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X<br>A  | US 4916885 A (LÖLIGER) 17 April 1990<br>See whole document                         | 1-5,13,14,20-23<br>15 |
| X<br>A  | US 5099895 A (LOELIGER) 31 March 1992<br>See whole document                        | 1-5,13,14,20-23<br>15 |

# INTERNATIONAL SEARCH REPORT

## Information on patent family members

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PCT/AU 99/00178

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in Search Report |         |    |          | Patent Family Member |          |    |          |
|--|---------|----|----------|----------------------|----------|----|----------|
| EP                                     | 072699  | AU | 87254/82 | BR                   | 8204813  | CA | 1182269  |
|  |         | ES | 515059   | ES                   | 8401399  | GB | 2105291  |
|  |         | GR | 76259    | JP                   | 58041026 | NZ | 201610   |
|  |         | US | 4805378  | ZA                   | 8205969  |    |          |
| EP                                     | 271242  | AU | 81460/87 | BR                   | 8706285  | CN | 87107932 |
|  |         | FI | 875114   | JP                   | 63152502 | NZ | 222611   |
|  |         | US | 4942716  | ZA                   | 8708670  |    |          |
| US                                     | 4916885 | AU | 24774/88 | BR                   | 8806182  | CA | 1289920  |
|  |         | CH | 674637   | CN                   | 1042875  | DK | 6549/88  |
|  |         | EP | 317908   | ES                   | 2014547  | FI | 885388   |
|  |         | JP | 1167030  | NO                   | 885212   | NZ | 227056   |
|  |         | PH | 25308    | PT                   | 89067    | SG | 789/94   |
|  |         | ZA | 8808430  |                      |          |    |          |
| US                                     | 5099895 | AU | 53796/90 | CA                   | 2015357  | CH | 679768   |
|  |         | EP | 395933   | JP                   | 2302257  | PT | 93928    |
| END OF ANNEX                           |         |    |          |                      |          |    |          |